CITY COUNCIL REPORT PUBLIC

DATE: September 6, 2019

TO: Mayor and City Council Members

FROM: Daniel Folke, AICP, Community Development Director

Rick Barrett, PE, City Engineer

Gary Miller, PE, Development Engineer

CC: Greg Clifton, City Manager; Sterling Solomon, City Attorney;

Shane Dille, Deputy City Manager; Shannon Anderson,

Deputy City Manager; Leadership Team

SUBJECT: City Surveyor

Introduction:

During discussion of an item to dedicate land as public right-of-way at the City Council Meeting on April 2, 2019 a question was raised regarding the City Surveyor staff position. This report is intended to provide Council with a history of the past position, why it was eliminated, the typical responsibilities of the position, and how these survey responsibilities are handled now.

History & Background:

Prior to 2006 the City Engineer had a Survey Program that consisted of a City Registered Land Surveyor (RLS) and two Engineering Technician positions. In subsequent years this was reduced to a lead worker and Engineering Technician position. Eventually the entire program was eliminated in FY11, primarily as a result of the recession and resulting budget cuts.

The following table identifies typical responsibilities of a city surveyor and how these responsibilities are managed today. While we no longer have a registered land surveyor on staff, we manage specific tasks with the staff best qualified to complete the work as time allows.

Item #	Typical City Surveyor Responsibility:	Current staff responsible
1	Manage city right-of-way and easements. (This includes maintaining land records, establishing locations, monitoring/preventing encroachments, and overseeing dedications.)	Real Estate Manager
2	Manages land title and boundary surveying of city owned parcels. (This includes maintaining land records, establishing locations, and monitoring/preventing encroachments.)	Real Estate Manager
3	Prepares and/or reviews survey documents (legal descriptions and maps) for acquisitions and disposal of city property, right-of-way and easements.	Contract Services with a budget of \$10,000 per year.
4	Prepares and/or reviews survey documents (legal descriptions and maps) for agreements and other legal documents.	*Development Engineering Specialist
5	Manages selection and implementation of contract surveying services for the city.	*Development Engineering Specialist
6	Helps integrate accurate data into city GIS.	*Development Engineering Specialist
7	Manages the city wide horizontal and vertical control network.	Not Being Done
8	Provides a primary point-of-contact for private surveyors/engineers working in the city.	*Development Engineering Specialist
9	Provides information to the public regarding property boundary issues. Responds to citizen and business questions about property boundaries.	** Private Consultants provide this for a fee.
10	Designs and implement a system for monument preservation on both public and private projects within the city.	Not Being Done, survey monuments being lost & damaged.
11	Prepares or reviews accurate administrative and regulatory boundaries (for example: annexation boundaries or land planning boundaries).	** Private Consultants complete this for developers with no oversite or review.
12	Supervise the land subdivision process and other aspects of land regulation within the city. (This includes lot-line-adjustments, parcel mergers, elevation certificates, LOMA/LOMR applications, pad certifications, and building set-back verifications.)	** Private Consultants complete this for developers with no oversite or review.

^{*}The assigned City Program lacks the specific education and training that a Registered Land Surveyor would have to thoroughly achieve this responsibility, and it may not be a priority work task given other duties of the program.

**The private consultant takes on the risk, and costs for these responsibilities are being passed on to developers and citizens. The private sector is also better able to manage fluctuations in the work load of these responsibilities.

When the Survey Program was eliminated, the Development Engineering program was allocated a \$10,000 annual budget that is used to pay for the preparation of legal descriptions (identified in #3 above). This amount covers the preparation of 1-4 legal descriptions per year. This service by the private sector tends to cost more than if it was performed internally.

Development Engineering has done its best to stay engaged with the local survey community/consultants to try and address other items on the list above. During the last revision of the Engineering Standards we successfully engaged the Northern Chapter of APLS (Arizona Professional Land Surveyors) to help us rewrite our standards on surveying and mapping.

While this approach has addressed a couple of the items in the table above, we still lack the RLS expertise to provide oversite on all these items. Development Engineering reviews plats and legal descriptions to the level of our expertise and understanding. Other items on the list of specific concern that have been brought to our attention by the local survey community are items 4, 7, 10 and 11 above. The local survey community has explained that the lack of expertise, and maintenance of our infrastructure creates additional challenges and costs to customers.

An example is the lack of maintenance of published benchmarks that surveyors rely on for vertical control of surveys (#7). These are used to verify finished floor heights of buildings in floodplains. With the regular maintenance of our roads these monuments can be damaged or moved and no longer accurately reflect our published benchmark elevations. Surveyors have reported significant errors in our published data on a couple of benchmarks. This could result in building elevations being incorrect for floodplain determinations, or cause errors in the construction of sewer or drainage infrastructure. These errors can be resolved by private consultants utilizing other known monuments further away, but this does require additional work and cost when necessary.

In response to these concerns, Development Engineering is working with the budget team to fund contract services to address items #7 and #10 in the table above. Should funding be found the City will need to partner with a RLS to assist with developing a scope of services that will best serve the city's needs.

Conclusion

This report was intended to provide Council with a history of the City Surveyor position, a better understanding of the roles and responsibilities of this position, and how the services are provided today. Staff recognizes the importance of these services and will continue to work with the budget team to address the need.

Reference

Blake, L. (2016). Why every city needs a strong city surveyor. *California Surveyor*, 183, 10-15

This report is provided as information only.